

ABSTRACT

The present invention provides a process for preparing a sintered body comprising as a basic component aluminum magnesium titanate represented by the composition formula:  $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$  wherein the value of  $x$  is  $0.1 \leq x < 1$ . The process comprises a step of sintering a formed product from a raw material mixture comprising 100 parts by weight, calculated on an oxide basis, of a mixture comprising a Mg-containing compound, an Al-containing compound and a Ti-containing compound at the same metal component ratio as the metal component ratio of Mg, Al and Ti in the above composition formula, and 1-10 parts by weight of an alkali feldspar represented by the composition formula:  $(Na_yK_{1-y})AlSi_3O_8$  wherein the value of  $y$  is  $0 \leq y \leq 1$ .

According to the process of the present invention, a sintered body of aluminum magnesium titanate having stability in continuous use at high temperatures and excellent mechanical strength, while maintaining inherently low thermal expansibility of a sintered body of aluminum magnesium titanate, can be obtained.